

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Previously Presented): A method for modeling video teleconferencing network reliability, the method comprising:

obtaining historical data for multiple video conferences;

storing said historical data in a call history table, said historical data referenced to video teleconferencing equipment vendor or model identification information;

executing a modeling algorithm that produces a model representing the historical data;

analyzing the model to identify characteristics associated with undesirable outcomes for the video conferences; and

configuring a video teleconferencing network to avoid at least one of the identified characteristics associated with undesirable outcomes.

Claim 2 (Original): The method of Claim 1, wherein the operation of executing a modeling algorithm that produces a model comprise executing a decision tree algorithm.

Claim 3 (Original): The method of Claim 2, wherein the operation of executing a decision tree algorithm comprises executing an ID3-based algorithm.

Claim 4 (Previously Presented): The method of Claim 1, further comprising conducting a new video conference with the video teleconferencing network configured to avoid at least one of the identified characteristics associated with undesirable outcomes.

Claim 5 (Previously Presented): The method of Claim 4, further comprising:

updating the historical data to create new historical data that includes values representing characteristics of the new video conference;  
executing the modeling algorithm to produce a new model representing the new historical data;  
analyzing the new model to produce a result; and  
reconfiguring the video teleconferencing network according to the result.

Claim 6 (Original): The method of Claim 1, further comprising:  
evaluating the model to determine whether the model provides a desired level of efficacy; and  
in response to determining that the model does not provide a desired level of efficacy, using a different modeling algorithm to produce a different model.

Claim 7 (Original): The method of Claim 1, wherein:  
the method further comprises building a training set from the historical data;  
the operation of executing the modeling algorithm comprises applying the modeling algorithm to the training set; and  
the operation of analyzing the model comprises:  
deriving a rule set from the model; and  
analyzing the rule set to identify the characteristics associated with undesirable outcomes for the video conferences.

Claim 8 (Original): The method of Claim 7, wherein:  
the historical data includes attribute values for attributes of each video conference and an outcome value representing an outcome for each video conference; and

the operation of applying the modeling algorithm to the training set comprises:  
using the outcome values as categorical attributes for the modeling algorithm; and  
using the attribute values as non-categorical attributes for the modeling algorithm.

Claim 9 (Original): The method of Claim 7, wherein:

the operation of obtaining historical data for multiple video conferences comprises  
obtaining a first endpoint identifier, a first endpoint vendor, a second endpoint identifier, a  
second endpoint vendor, and an outcome value for the multiple video conferences;

the operation of building a training set comprises including the first endpoint  
identifier, the first endpoint vendor, the second endpoint identifier, the second endpoint  
vendor, and the outcome value for the multiple video conferences in the training set; and

the operation of executing the modeling algorithm comprises using the first endpoint  
identifier, the first endpoint vendor, the second endpoint identifier, the second endpoint  
vendor, and the outcome value for the multiple video conferences to produce the model.

Claim 10 (Original): The method of Claim 7, wherein:

the training set includes values representing a first set of attributes; and

the method further comprises:

evaluating the model to determine whether the model provides a desired level of  
efficacy;

in response to determining that the model does not provide a desired level of efficacy,  
building a different training set that includes a different set of attributes; and

applying the modeling algorithm to the different training set to produce a different  
model.

Claim 11 (Currently Amended): A tangible computer program product for modeling video teleconferencing network reliability, the tangible computer program product comprising:

a tangible computer-usable medium; and

computer instructions encoded in the tangible computer-usable medium, wherein the computer instructions, when executed, cause a data processing system to perform operations comprising:

obtaining historical data for multiple video conferences;

storing said historical data in a call history table, said historical data referenced to vendor or model identification information; and

executing a modeling algorithm that produces a model representing the historical data, such that the model can be analyzed to identify one or more opportunities for improving reliability of a video teleconferencing network.

Claim 12 (Currently Amended): The tangible computer program product of Claim 11, wherein the computer instructions cause the data processing system to perform further operations comprising:

outputting results that reveal at least one of the opportunities for improving reliability of the video teleconferencing network, such that a user can reconfigure the video teleconferencing network, based on the results, to improve reliability of the video teleconferencing network.

Claim 13 (Currently Amended): The tangible computer program product of Claim 11, wherein the computer instructions cause the data processing system to perform further operations comprising:

analyzing the model to identify the one or more opportunities for improving reliability of the video teleconferencing network; and

automatically reconfiguring the video teleconferencing network, based on the identified opportunities, to improve reliability of the video teleconferencing network.

Claim 14 (Currently Amended): The tangible computer program product of Claim 11, wherein:

the operation of executing a modeling algorithm that produces a model comprises executing a decision tree algorithm.

Claim 15 (Currently Amended): The tangible computer program product of Claim 11, wherein:

the operation of executing the decision tree algorithm comprises executing an ID3-based algorithm.

Claim 16 (Currently Amended): The tangible computer program product of Claim 11, wherein the computer instructions cause the data processing system to perform further operations comprising:

updating the historical data to create new historical data that includes values representing characteristics of a new video conference;

executing the modeling algorithm to produce a new model representing the new historical data;

analyzing the new model to produce a result; and

reconfiguring the video teleconferencing network according to the result to improve reliability of the video teleconferencing network.

Claim 17 (Currently Amended): The tangible computer program product of Claim 11, wherein the computer instructions cause the data processing system to perform further operations comprising:

building a training set from the historical data;  
executing the modeling algorithm by applying the modeling algorithm to the training set; and  
deriving a rule set from the model, such that the one or more opportunities for improving reliability of a video teleconferencing network can be identified by reference to the rule set.

Claim 18 (Currently Amended): The tangible computer program product of Claim 17, wherein:

the historical data includes attribute values for attributes of each video conference and an outcome value representing an outcome for each video conference;  
the modeling algorithm uses the outcome values as categorical attributes; and  
the modeling algorithm uses the attribute values as non-categorical attributes.

Claim 19 (Currently Amended): The tangible computer program product of Claim 17, wherein:

the computer instructions cause the data processing system to obtain a first endpoint identifier, a first endpoint vendors a second endpoint identifier, a second endpoint vendor, and an outcome value for the multiple video conferences;

the computer instructions cause the first endpoint identifier, the first endpoint vendor, the second endpoint identifier, the second endpoint vendor, and the outcome value for the multiple video conferences to, be stored in the training set; and

the modeling algorithm uses the first endpoint identifier, the first endpoint vendor, the second endpoint identifier, the second endpoint vendor, and the outcome value for the multiple video conferences to produce the model.

Claim 20 (Currently Amended): A data processing system for modeling video teleconferencing network reliability, the data processing system comprising:

one or more processing units;

a tangible computer-usable medium in communication with the one or more processing units; and

computer instructions encoded in the tangible computer-usable medium which, when executed by the one or more processing units, cause the data processing system to perform operations comprising:

obtaining historical data for multiple video conferences;

storing said historical data in a call history table, said historical data referenced to vendor or model identification information; and

executing a modeling algorithm that produces a model representing the historical data, such that the model can be analyzed to identify one or more opportunities for improving reliability of a video teleconferencing network.